

NATIONAL WILDLIFE FEDERATION ET AL.

IBLA 90-537

Decided April 14, 1993

Appeal from a record of decision and finding of no significant impact by the Montana State Office, Bureau of Land Management, approving amendment 008 to Golden Sunlight Mine operation and reclamation plan.

Motions to dismiss granted in part and denied in part. Decision affirmed in part and set aside and remanded in part.

1. Rules of Practice: Appeals: Standing to Appeal

Standing to appeal requires that an appellant be a party to the case adversely affected by the decision below. Organizations which did not participate in proceedings leading up to the appeal are not "part[ies] to a case" within the meaning of 43 CFR 4.410(a) for purposes of appeal and their appeals are properly dismissed for lack of standing.

2. Environmental Policy Act--Environmental Quality: Environmental Statements--National Environmental Policy Act of 1969: Environmental Statements--National Environmental Policy Act of 1969: Finding of No Significant Impact

The general standard upon NEPA review of a BLM decision based on a FONSI for the proposed action is whether the record establishes that BLM took a "hard look" at the environmental consequences of the action; identified the relevant areas of environmental concern; made a reasonable finding that the impacts studied are insignificant; and, with respect to any potentially significant impacts, whether the record supports a finding that mitigating measures have reduced the potential impact to insignificance. Where the action is further modified by stipulations designed to mitigate potential impacts on the basis of comments responding to the analysis in the EA, the appeal will be reviewed on the whole record including the modifications.

3. Environmental Policy Act--Environmental Quality: Environmental Statements--National Environmental Policy Act of 1969: Environmental Statements--National Environmental Policy Act of 1969: Finding of No Significant Impact

As a general rule, a FONSI for a proposed action may not be predicated solely on monitoring of environmental impacts because doubt as to the nature of the impacts ordinarily precludes a rational basis for a FONSI. Where the record discloses an analysis of the impacts of the proposed action and the imposition of stipulations designed to mitigate any potentially significant impacts, use of monitoring to determine the choice of alternate methods of mitigation does not itself compel reversal of a FONSI. However, a FONSI may be set aside and remanded where it appears from the record that the mitigating measures stipulated may be inadequate to mitigate potentially significant impacts.

4. Mining Claims: Plan of Operations

Approval of a mining plan of operations will be set aside and remanded where the record indicates that BLM analyzed the plan of operations and reviewed environmental impacts, but conditioned approval of the plan on the performance of measures which may be inadequate to mitigate or prevent any unnecessary or avoidable environmental degradation.

5. Endangered Species Act of 1973: Section 7: Consultation

Where the record discloses that mining activities pursuant to a BLM-approved plan of operations are likely to affect any threatened or endangered species, no formal consultation with FWS is required under sec. 7 of the ESA, 16 U.S.C. § 1536 (1988).

6. Migratory Bird Conservation Act: Generally

The approval of a mining plan of operations does not involve a "taking" of migratory birds under the Migratory Bird Treaty Act, 16 U.S.C. § 703 (1988). This Act was not intended to include habitat modification or degradation among its prohibitions.

APPEARANCES: Thomas M. France, Esq., Missoula, Montana, for National Wildlife Federation, Montana Environmental Center, Mineral Policy Center, Sierra Club and Northern Plains Resource Council; Alan J. Joscelyn, Esq., Helena, Montana, for Sunlight Mines, Inc.; John F. North, Esq., Helena, Montana, for the State of Montana Department of State Lands; Kathleen M. O'Connell, Esq., Office of the Solicitor, U.S. Department of the Interior, Billings, Montana, for the Bureau of Land Management.

OPINION BY ADMINISTRATIVE JUDGE GRANT

National Wildlife Federation (NWF), Montana Environmental Information Center (MEIC), Mineral Policy and Northern Plains Resource Council (appellants) bring this appeal from a June 30, 1990, record of decision (ROD) of no significant impact (FONSI) of the Butte District Manager, Bureau of Land Management (BLM). The ROD 008 to the Golden Sunlight Mine operating and reclamation plan. The amendment, authorizing expansion of the operation through Stage V, was requested by Golden Sunlight Mines, Inc. (GSM). The BLM ROD and FONSI were found in an environmental assessment (EA) and on further mitigating stipulations developed subsequent to "incorporated by reference."

The EA was jointly issued on May 30, 1990, by Montana Department of State Lands (DSL) and by BLM.

The surface and minerals of the lands affected by the mine operations are controlled by GSM through a combination of ownership and patented and unpatented mining claims, which it owns or leases (EA at 9). Regulation of surface mining with operations on unpatented mining claims on the public lands is administered by BLM under the surface management regulations, 43 CFR Subpart 3809. 1/ Under these regulations, an approved plan of operations is required prior to commencing a surface disturbance in excess of 5 acres. 43 CFR 3809.1-4; see Differential Energy, Inc., 99 IBLA 225 (1987). Under the Mine Reclamation Act, responsibility for issuing permits required to mine for metals, including gold, within the State is in the DSL. See Mont. Code Ann. § 82-4-335 (1983). In view of their joint responsibility for oversight of mine operations at the mine, BLM and DSL collaborated in reviewing the application to expand the mine operation and issued the EA in response to the application. See 43 CFR 3809.3-1. 2/ Shortly after issuance of the BLM ROD, DSL issued the ROD on July 9, 1990, approving the amendment to the mine operating permit subject to the imposition of 31 stipulations specified in the permit amendment. It appears from the record that these stipulations, developed in the period from the analysis of the comments received on the EA by the June 29 deadline, were the stipulations incorporated by reference. See Letter of July 25, 1990, from DSL to Thomas France, NWF (BLM Exh. 1 at C, 13). For purposes of our review, we will necessarily consider the EA and the response to comments submitted on the EA in reviewing this case.

1/ These regulations were promulgated, in part, pursuant to the authority found in section 302(b) of the Federal Land Management Act of 1976, 43 U.S.C. § 1732(b) (1988), requiring BLM to "take any action necessary to prevent the degradation of the lands."

2/ Operating Permit No. 00065 was issued by DSL for this project in 1975. An environmental impact statement was issued in 1981 for amendment 001 to the permit and EA's were prepared for subsequent amendments (EA at 4).

The gold deposit mined by GSM is located in the southern end of the Bull Mountains, in the Whitehall Mining County, Montana (EA at 13). Overburden removal and ore production currently are accomplished by conventional techniques (EA at 45). Ore and waste material are drilled and blasted, loaded onto trucks, and transported to the mill and waste rock dumps, respectively. Ore is extracted from pit benches and hauled to corresponding dump elevations at waste rock dump complexes to the north, south, and west of the pit. Ore is hauled by truck from the pit to the mill where it is crushed and then is vat leached with a sodium cyanide solution to extract gold. The resulting tailings are slurred to an impoundment for the mill is recirculated from the tailings pond. Water that is lost to evaporation or retained within the tailings impoundment is replaced by pumping water from the Jefferson Slough. Id. at 46. The present permit authorizes GSM to mine through Stage III (completed in 1993) with a permit area of 4,113 acres and a surface disturbance area of 1,371 acres (EA at 4). At that time, the pit will have a surface area of 140 acres, the waste rock dumps 320 acres, and the tailings impoundment (Impoundment I) 1,000 acres (EA at 4). Further, at that time the pit will have a maximum depth of 600 feet and a "1,600 foot highwall to the west"

Under amendment 008 GSM proposes to expand mine production from Stage III to Stage V, extending to the year 2005 resulting in cumulative production of 50 million tons of tailings and 300 million tons of waste rock (EA at 4). Through Stage V will create a pit 209 acres in size "daylighting" the east flank of the Bull Mountains at an elevation of 5,350 feet, require removal of the ridge top and east flank of the mountain to a 1,000 foot highwall on the west. The pit bottom would be at elevation 4,800 feet, which is 1,200 feet below the existing hillside and 225 feet below the existing groundwater elevation (EA at 49).

The mining, milling and metallurgical processes will not change under the amendment. Id. at 4. A second impoundment (Impoundment II) would be needed for the Stage IV and Stage V expansion and would be constructed east of Impoundment I. Tailings Impoundment II would hold 30 million tons of additional tailings, be up to 150 feet deep, and cover 250 acres (EA at 4, 50, and GSM Comments (June 27, 1990) at 5). The existing waste rock dumps would be expanded to cover 770 acres northeast, south and west of the existing pit (EA at 4, 9). Disturbance under the amendment would increase to 2,601 acres. Under the approved amendment GSM would be the second largest metal mine in Montana, and would be the largest Montana gold mine in terms of waste rock handled and acres disturbed (GSM Comments (June 27, 1990) at 5). GSM acknowledges that "[t]he scale of this operation in conjunction with the proposed reclamation of steep slopes and the waste materials adds new dimensions to an already large reclamation undertaking." The "success of reclamation is critical" (EA at 1).

Certain preliminary matters remain to be resolved before reaching the merits of the case. GSM has filed appeals of the Mineral Policy Center and the Sierra Club for lack of standing, asserting that they did not participate below (GSM Answer at 17). Review of the record before the Board, including the responses by DSL and BLM to the appeals, fails to show that comments on the EA were submitted by either group.

[1] Appellants Mineral Policy Center and Sierra Club do not deny GSM's assertions that they did not participate in proceedings below and our review of the record fails to disclose such participation. As a general rule, standing to appeal a decision of BLM requires that an appellant be both a party to the case and adversely affected by the decision below. 43 CFR 4.410. The lack of participation by these appellants in the case prior to issuance of the BLM decision indicates they were not a party to the case and lack standing to appeal. The Wilderness Society, 110 IBLA 67, 72 (1989); Edwin H. Marston, 103 IBLA 40 (1988). GSM's motion to dismiss the respective appeals of Mineral Policy Center and Sierra Club for lack of standing.

GSM has also moved to dismiss the appeals of NWF and MEIC for failure to timely file the appeals as required by 43 CFR 4.410. GSM states that the underlying proceeding was a permit application and while NWF and MEIC commented on the application, there is no requirement that commenters be served with a copy of the decision. In this case, BLM did not serve the appellants with a copy of the ROD until June 30, 1990, on appellants. BLM personally served GSM with a copy of the ROD on June 30, 1990, and the ROD was mailed to DSL on July 12, 1990, at 12). The DSL decision approving the permit amendment was issued on July 9, 1990, and GSM concedes a copy of the decision was mailed to DSL on July 12, 1990, at 12). and "possibly" the BLM decision were not received by appellants until July 16 or 17 (Answer at 12-14).

The BLM Manual at H-1790-1 contains a handbook designated as the "National Environmental Policy Act Handbook." Section 6 in Chapter IV of that handbook guidance is given concerning notifying the public of issuance of EA's and FONSI's. BLM determines that the EA and FONSI should be released for a period of public comment:

Generally, notice of the review should be announced in regional and local newspapers or other media. A copy of the EA and FONSI must be provided to individuals and organizations who requested one. Copies should also be provided to individuals and organizations affected by or known to have an interest in the action.

Chapter IV, B.4.a.

Even if public review is determined not to be necessary, "the affected and interested public must be notified of the EA and the FONSI * * *," and "all individuals or organizations that have requested notification on an individual basis must be notified by mail." Chapter IV, B.4.b.

While it is apparent from the record that comments were solicited on the EA from individuals and organizations for a period of 30 days, BLM issued its ROD and FONSI on June 30, 1990, to NWF and MEIC, who assert that they had requested that BLM notify them of its action on the amendment. Without doubt this assertion, the record shows interest on their part which, alone, should have triggered notice. Nevertheless, that counsel for NWF and MEIC requested and received a copy of the ROD and FONSI on July 16, 1990. BLM confirmed that fact in a letter to counsel, dated July 17, 1990, which it stated that the time to appeal started to run from the date he received his copy (Appellants' Exhibit No. 15). The appeal was filed with BLM on August 15, 1990, within 30 days of receipt of the decision as required by the relevant regulation. Accordingly, the motion to dismiss the appeals as untimely is denied.

Appellants maintain that the EA contains overwhelming evidence to demonstrate that the expansion will cause severe impacts to the environment. They assert "the near certainty of reclamation failure, the significant possibility of severe acidification, the creation of a toxic lake and the disturbing lack of data on the area's groundwater hydrology are readily apparent from the record" (Appellants' Statement of Reasons at 19). Appellants argue that preparation of an EIS is required where an agency anticipates significant environmental impacts. Appellants contend that the judicial standard used by the Ninth Circuit (which is reviewing an agency's decision not to prepare an EIS is whether the agency has reasonably concluded that significant impacts will not occur, citing Foundation For North American Wild Sheep v. Department of Agriculture, 681 F.2d 1172, 1181 (9th Cir. 1982), City of Davis v. Coleman, 521 F.2d 661, 673 (9th Cir. 1975).

Appellants aver that the EA admits that significant impacts may occur, citing the discussion of the preferred alternative in the EA states:

This alternative further improves the likelihood of successful reclamation, reduces the amount of treatment required, which would require treatment in perpetuity and reduces the overall impact to other resources addressed in the EA. If this alternative is selected, the additional modifications in Chapter 4 of the permit may be stipulated in the permit. Although impacts to the environment have been further reduced by this alternative, agencies cannot categorically state that the long-term cumulative impacts would or would not be avoided. [Emphasis supplied.]

(EA at 142-43). Appellants argue that this finding that significant impacts may occur squarely contradicts the Decision's conclusion that preparation of an EIS is not required.

Appellants also contend that BLM erred in failing to include in the EA an analysis of the impact of the proposed treatment plant for acid mine drainage. The treatment facility is alleged to be a connected action requiring analysis in the EA.

In addition to the National Environmental Policy Act of 1969 (NEPA), 42 U.S.C. § 4332 (1988), challenge that BLM violated its own surface management regulations by failing to ensure that successful reclamation with appellants challenge the allowance of waste rock dumps with slopes of 2h:1v (ratio of 2 horizontal to 1 vertical) in 3h:1v, where the record indicates such slopes will likely fail to allow successful reclamation.

Further, appellants assert that BLM violated section 7 of the Endangered Species Act (ESA), 16 U.S.C. § 1536, to ensure that the proposed action is not likely to jeopardize the habitat of any threatened or endangered species. A Jefferson River and the Boulder River, each a little over a mile from the permit boundary, are acknowledged as habitat for peregrine falcons. Appellants also contend that the presence of waterfowl killed by exposure to toxic substances in the area attract eagles to the ponds where they too will be killed.

Finally, appellants argue that the BLM decision violates the Migratory Bird Treaty Act (MBTA), 16 U.S.C. § 668, prohibiting the unauthorized hunting or taking of migratory waterfowl. This taking claim is based on the fact that the area is a wetland and that there is a resulting mortality risk associated with landing on the tailings ponds.

Counsel for DSL argues that the issue on appeal of a BLM decision record and FONSI involving a project which would result in significant environmental impacts is whether these impacts are reduced below the level of significance through mitigation measures. See Cabinet Mountains Wilderness v. Peterson, 681 F.2d 1182 (9th Cir. 1982). Conceding that the EA recognized the potential for significant environmental impacts, DSL points out that a comment filed in response to the EA, the EA was clarified to reflect that: "Although impacts to the environment have been identified, an alternative, the agencies cannot categorically state that the long-term cumulative impacts would or would not be significant additional monitoring and studies." (Comments on Golden Sunlight EA at 12, No. 48, at 39, No. 158 (emphasis added)). DSL contends that at this point additional monitoring and studies were required through stipulations attached to approval of the permit. DSL contends that the stipulations imposed regarding collection of information are designed to ensure that significant impacts are avoided. Hence, these additional requirements form the basis for the conclusion in the DSL ROD.

3/ A complete compilation of comments on the EA together with responses to those comments, which document was provided by DSL to BLM with a cover letter dated Sept. 21, 1990. The comments received by BLM before the announced deadline of June 29, 1990, were considered in the drafting of stipulations which conditioned the permit approval. Some of the comments and responses in this compilation are not in the ROD and FONSI, however, they are still relevant to our review of the impact of the project as approved.

that: "The permanent water treatment committed to is believed to preclude significant impacts to ground and surface water. The commitment for 3:1 slopes, with bond, based on monitoring and research, are believed to preclude significant impacts to the post mining landscape and to the quality of the human environment" (ROD at 9). ^{4/}

The answer filed by counsel for BLM also asserts that no EIS is required where the proposed action has been implemented by addition of specific mitigating measures which preclude significant adverse environmental impacts. See Native Community Council, 88 IBLA 210, 216 (1985), aff'd in part, Tulkisarmute Native Community Council v. Corcoran, 883 F.2d 1111 (D. Alaska Oct. 17, 1988). BLM contends it is clear from the record that the agencies took the required "hard look" at the consequences of the proposed action and required modifications to avoid significant adverse environmental impacts. BLM notes that the EA examined the environmental impacts associated with the facility for treatment of water in the pit and from the waste dumps and the tailings impoundments.

With respect to the ESA, BLM contends that no consultation with the U.S. Fish and Wildlife Service (FWS) was required. Although peregrine falcons is found along the nearby Jefferson and Boulder Rivers, BLM asserts that adverse impacts from the proposed action are unlikely in view of the fact that the habitat along the rivers is superior to the mine site. Further, BLM argues that impacts from feeding on waterfowl killed by exposure to water in the pit or pit are unlikely in view of measures to keep waterfowl from frequenting these areas. Similarly, BLM argues that the proposed action establishes that waterfowl will be killed by the proposed action defeats any possible claim under the MBTA. BLM contends that in certain arid regions, the water impoundments associated with the mine are not a primary water source.

BLM also defends its compliance with the requirements of the surface management regulations. It argues that the measures imposed on approval of the permit amendment are adequate to ensure successful reclamation of the affected lands and to prevent erosion and undue degradation.

Counsel for GSM also points out that the analysis set forth in the May 1990 EA does not constitute the basis for the FONSI which the FONSI was based. Following completion of the EA, further stipulations were developed which allowed for the issuance of a FONSI. While conceding that questions remain regarding the efficacy of reclamation on 2h:1v slopes, GSM asserts that the questions will be resolved before reclamation is completed.

^{4/} The BLM FONSI had a similar basis, stating: "Based on the analysis of the potential environmental impacts of the preferred alternative, and on the extensive monitoring program included as stipulations to the permit, I have determined that the impacts are not significant and an environmental impact statement is not required" (BLM ROD at 1).

allowed to proceed with 2h:1v slopes. Safeguards are in place, GSM notes, to ensure reclamation at 3h:1v slopes (agencies have determined will allow successful reclamation) in the event this proves necessary. Further, GSM notes analyzed the impact to surface and groundwater and the impacts of a water treatment facility.

[2] It is clear from the record that the appeal in this case must be decided not solely on the basis of the action in the May 1990 EA itself. Rather, the reasonableness of the action must also be judged in light of the responding to the EA and the changes (stipulations) imposed on the proposed action as a result of comments filed. The record establishes that BLM and DSL took a "hard look" at the environmental consequences of the proposed action in relevant areas of environmental concern, made a reasonable finding that the impacts studied are insignificant and that potentially significant impacts, whether the record supports a finding that mitigating measures have reduced the impacts to insignificance. Cabinet Mountains Wilderness v. Peterson, 685 F.2d at 681-82; Powder River Basin Resource Conservation v. BLM (1991); Tulkisarmute Native Community Council, 88 IBLA at 216.

The challenge to the adequacy of the FONSI focusses on two related aspects of reclamation. One concern is waste rock dumps and tailings impoundments in terms of protecting against the infiltration of water and oxygen which can create deposits giving rise to acid mine drainage. A related problem is posed by the need to dispose of any acid mine drainage both in association with the dumps and impoundments and in the open mine pit, without adversely impacting surface water resources.

The EA acknowledged potential reclamation problems using 2h:1v slopes on waste rock dumps, noting that 3h:1v was recommended by the regulatory agencies because of the erosion potential on long steep slopes (EA at 15). Comments on the EA indicates that: "GSM successfully argued that they should be given a chance to test the 2:1 slope and not prove that 2:1 slope reclamation would fail" (Comments on Golden Sunlight EA at 15, No. 62). Although reclamation was not required as a condition of permit approval, BLM and DSL claim that GSM has been required to file a bond for reclamation to 3h:1v while establishing a test plot to evaluate the effectiveness of reclamation with a 2h:1v slope. In answer to

5/ The EA discussion of the GSM proposal with supplemental commitments (Chapter IV) indicates that:

"GSM committed to testing and evaluating 2h:1v slope reclamation on the waste rock dumps while submitting a bond for 3h:1v slopes (BLM Letter to DSL, March 2, 1990). A reclamation test plot is to be established on one of the waste rock dumps using reclamation plan methodologies currently permitted. If reclamation attempts fail, the plan calls for reducing

a comment on the EA noting the doubt regarding success of long term reclamation, the response was:

The agencies do not have enough data to conclude that the stipulated reclamation plan will guarantee reclamation success at this time. Hopefully, the stipulations attached to their permit on reclamation and continual monitoring will provide the information needed to ensure future Montanans are not asked to re-encounter disturbances at some time in the future. Bond has been increased from 1.8 million to 38.6 million dollars in expansion to ensure that GSM will pay the true reclamation cost.

(Comments on Golden Sunlight EA at 22, No. 91). Responding to another comment objecting to allowance of 3:1 slopes, it was stated that: "GSM must meet stringent agency success criteria which will be difficult to achieve. If the ratio of the remaining dumps will be at 3:1" (Comments on Golden Sunlight EA at 23-24, No. 94).

The EA also disclosed potential adverse impacts to water resources. Recognizing that allowing acid mine drainage by the mining operation to invade the surface and groundwater resources would violate statutory and regulatory requirements (EA at 70-71), the EA analyzed the proposed action as modified by GSM's supplemental commitment to treat effluents from tailing impoundments (EA at 97-98). Under Chapter VII, Related Actions and Cumulative Impacts, the EA noted that "the proposed action could lead to violations of water quality standards for copper in the Jefferson River approximately 10 percent of the time in the worst case scenario" (EA at 137). ^{6/} However, it is clear from the record that DSL and BLM believe that this impact will be avoided.

fn. 5 (continued)

the slopes to 3h:1v. During the life of the mine, GSM would develop a more detailed reclamation plan based on test results. The agencies and the mining company have agreed on reclamation success parameters to be used to evaluate test results proposed by GSM * * *."

(EA at 93). Although BLM, DSL, and GSM all recognize the existence of the commitment to alter slopes to 3:1 and to guarantee this work, the source of this commitment is not cited. Review of the record discloses that the commitment to alter slopes, as necessary, to as much as 3h:1v, if the reclamation test plot fails to achieve the success parameters agreed upon by BLM and GSM" is expressly stated in GSM's June 1990 comments on the EA which are incorporated by reference in the DSL decision approving the permit amendment (GSM Comments of June 27, 1990, at 17; DSL Decision at 1).

^{6/} In response to a comment on the EA expressing the concern that exceeding standards for acute copper toxicity would wipe out the fishery in the Jefferson River, the agencies acknowledged that "copper flushes at any time to the river due to influences on the fishery" (Comments on Golden Sunlight EA at 33, No. 123).

of effectively reclaiming waste rock dumps and tailings impoundments to minimize any acid drainage and by treating acid drainage which is generated. See, e.g., Comments on Golden Sunlight EA at 15-16, No. 64, at 37-38, No. 149.

Regarding a comment on the EA objecting to the failure to prepare an EIS in view of the uncertain likelihood of acid mine drainage from the waste rock dumps, the response was:

The agencies agree there is some uncertainty regarding precise quantification of some factors. Additional research and monitoring is intended to provide that quantification. Aside from that however, the EA discusses perpetual treatment of pit and impoundment water and describes a reclamation plan with modifications which the agencies believe will minimize or preclude development of acid mine drainage from the waste rock. Given the anticipated commitment to treat and the commitment to 3:1 slopes, with a rock cap, clay layer and lime treatment, the agencies do not believe there is significant uncertainty with regard to impacts.

(Comments on Golden Sunlight EA at 15, No. 64).

Review of the record in this case including the EA, the analysis of responses thereto, and the stipulations of this process, discloses that officials of DSL and BLM, as well as the permittee, have made impressive efforts to reclaim lands disturbed by this massive mining operation and to avoid significant adverse environmental impacts. The DSL record of decision approving the permit amendment was expressly predicated on certain stipulations designed to avoid impacts disclosed in the EA. These stipulations are closely related to the modifications to the proposed action disclosed in the EA (the preferred alternative).

Thus, with respect to reclamation of waste rock dumps, GSM must "construct drainage or seepage collection system on the foundation beneath the waste rock dumps, made of calcareous subsoils and constructed on the contours of the slope." GSM is also required to design and construct an engineered diversion both around and off the tops of the reclaimed waste rock dumps handling a 100-year 24-hour precipitation event (Stipulation No. 4). The EA notes that GSM is committed to treating acid mine drainage from the waste rock dumps under the terms of its preexisting permit (EA at 93; see GSM Compliance Agreement, 1990, at 18).

As noted in the analysis in the EA, the preferred alternative requires placing a waste rock cap on the waste rock dumps, replaced soil from the underlying waste rock in order to reduce the risk of oxidation of the pyrite in the waste rock, and to prevent acidified soil moisture from the underlying waste rock layers" (EA at 101, 120). To facilitate reclamation success, the permit approval decision requires that the permittee "must evaluate and report the acid-producing

potential characteristics and lime requirements of the oxidized waste rock cap during placement" (Stipulation No. 1). The EA also requires that a "research and monitoring plan" be developed and applied to the cap rock layer if testing revealed this material was not neutral, although the EA disclosed that applying lime to the cap rock layer would be difficult at dump slopes of 2h:1v (EA at 102). As a condition of approval, the permit requires the development of a "research and monitoring plan" to evaluate the variables affecting oxidation of pyrite in the waste dumps and potential acid drainage. Factors to be analyzed under the plan include the effectiveness of the rock cap and of the soil layers and the movement of water and oxygen in the waste dumps (Stipulation No. 2). Regarding the slope of the waste rock dumps, GSM is required to design erosion control measures to "minimize soil loss off steep, long waste rock dump slopes" and to monitor erosion rates to validate the effectiveness of proposed benching or other slope breaks in minimizing total effective slope (Stipulation No. 8).

With respect to the tailings impoundments, the EA concluded in the analysis of the preferred alternative that:

In order to mitigate the potential seepage and subsequent impacts to impoundment stability and to the likelihood of successful reclamation on the embankment face, a wedge of net neutralizing material, either waste rock or calcareous borrow material, should be applied to the front of the embankment face to bring the overall slope of the embankment face to 3h:1v. This material would form a "wedge" ranging from 12 feet at the base to 24 inches at the crest.

(EA at 121). The stipulations imposed on permit approval do not contain this requirement, although the stipulations require that a "research and monitoring plan" be developed and applied to the embankment face by GSM for the 1991 annual report of methods for minimizing seepage of acid drainage at the face of the embankment (Stipulation No. 10). Once again monitoring of results is a key: the permit requires the development of a monitoring plan to quantify the amount of seepage from impoundment I and the effectiveness of reclamation (Stipulation No. 13). Pumpback wells for impoundment I must operate and discharge during mine life and, thereafter, they must pump to a treatment facility until surface water quality standards can be met (Stipulation No. 14). The stipulations also direct initiation of a test plot on impoundment I to test the effectiveness of the approved alternative reclamation scenarios (Stipulation No. 18).

Water treatment by GSM will use a combination of reverse osmosis, carbon treatment and evaporation. Tailings seepage, estimated by GSM at 14 gallons per minute (gpm), will be pumped through a series of membranes to treat the feedwater to attain water quality standards for discharge 7/ (EA at 97; Exhibit 11 of

7/ Standards for the quality of water discharged from mine pits are set pursuant to the terms of the Montana Metal and Nonmetallic Mining Act and implementing regulations. See EA at 70-71.

the Administrative Record (Golden Sunlight Mines, Description of Water Handling and Water Treatment Alternatives). Treated water will be pumped to a 1-acre percolation pond or an ephemeral stream down gradient of the tailing pond. Remaining brine water will be evaporated in a separate lined impoundment and the resulting precipitated wastes will be disposed of in a 10-acre lined impoundment, with each impoundment having a 500-year capacity. As each 2-acre impoundment is filled, it will be covered with a soil and vegetative cover (EA at 97-98; BLM Response at 8). 8/

The EA concluded that GSM's inflow calculations "could be low by an order of magnitude and that the pit could likely produce up to 60 gpm" requiring a somewhat larger evaporation pond and more precipitated solids (EA at 116). Hence, GSM is required to provide a bond ensuring "funds for the construction and operation of a permanent water treatment facility" when the pit intersects the level of the water table (Stipulation No. 20). The amount of the bond is to be converted to a permanent fund under control of the State at the close of mine operations, is to be based on actuarial data required based on the final treatment methods; the amount of water to be treated (presumed to be 75 gallons per minute if no other data indicating otherwise is developed); and the costs of operation, depreciation, and maintenance (Stipulation No. 20).

In addition to the stipulations, approval of the permit amendment is expressly based upon the commitment to develop and submit itemized documents exchanged between GSM and DSL from January through June 1990 (Amendment No. 008 at 11). GSM is required to submit a "revised, consolidated operating and reclamation plan which reflects all of the documents" required to be developed by the time of the 1991 report (Stipulation No. 29).

8/ Appellants also argue that the EA is deficient because of a complete failure to assess the impacts of the proposed water treatment plant and related residue disposal facility. Appellants contend that the construction of the water treatment plant and disposal facility, the potential impacts of which should have been considered in the EA as cumulative impacts, but were not, that such facilities were reviewed in the EA. See EA at 97-98, 116, 125, 139, 142; see also Hydrometrics, Inc., Golden Sunlight Mine, Whitehall, Montana - Description of Water Handling and Water Treatment Alternatives (1990) (Exh. 11 to the Record). In response that the DSL and BLM clearly considered the treatment plant and disposal site as a contingency, citing the Golden Sunlight EA at page 6, No. 18. Thus, it is not a certainty that those facilities will be constructed. Clearly, it depends on the success of the company's reclamation efforts, which DSL and BLM will be closely monitoring. In Comments on the Golden Sunlight EA, 32, No. 118, the agencies admit that "water treatment in perpetuity is an undesirable alternative and should only be considered if necessary. Nevertheless, GSM has committed to construction of such facilities in the event they are necessary. See Stipulation No. 29."

[3] It is somewhat unusual to predicate a FONSI on a program of monitoring coupled with contingency mitigation measures. This is true, at least in part, because one of the factors in determining whether an EIS is required is the degree to which possible effects on the human environment are uncertain or involve unique or unknown risks. See 40 CFR 1508.27(b)(5) ("degree to which possible effects on the human environment are uncertain or involve unique or unknown risks"). Further, where a FONSI is based on a conclusion that mitigating any potentially significant impacts the Board has held that the record must disclose an analysis of the proposed measures and how effective they would be in reducing the impact to insignificance. Idaho Natural Resources Legal Foundation v. BLM, 120 IBLA 34, 42-45 (1991). 9/

However, we think this case is properly distinguished from those where mitigation measures to reduce impacts to insignificance have neither been articulated, analyzed, nor stipulated to by the permittee. Further, the present situation is distinguished from those cases where a FONSI has been reversed on the ground the record discloses that monitoring of impacts would not suffice to ensure that potential impacts which might otherwise be significant are mitigated. In Powder River Basin Citizens Council v. BLM, 120 IBLA 47 (1991), the Board overturned a FONSI for coalbed methane drilling where it was clear that monitoring of impacts to water wells would not suffice to mitigate significant impacts to the aquifer. 120 IBLA at 47. In Thunder, Inc. v. BLM, 124 IBLA 267, 279 (1992) (FONSI upheld in the absence of showing that the monitoring plan is inadequate to ensure that area waters will not be polluted).

In this case, monitoring is the key to the ultimate choice of strategies for reclamation, not to determining whether reclamation is required. In particular, monitoring of the success of the reclamation of rock dumps and the tailings impoundments will dictate whether slopes are to be reclaimed at a slope of 3h:1v, as required by the water treatment facility.

9/ We are cognizant of the Supreme Court decision in Robertson v. Methow Valley Citizens Council, 490 U.S. 332 (1989), that: "There is a fundamental distinction, however, between a requirement that mitigation be discussed in sufficient detail so that environmental consequences have been fairly evaluated, on the one hand, and a substantive requirement that a concrete mitigation be actually formulated and adopted, on the other." 490 U.S. at 352. However, we find the Robertson case to be distinguishable from the case at hand in one crucial respect. In that case, the Forest Service prepared an EIS prior to issuance of a special use permit for a ski area. In the context of Forest Service compliance with the procedural requirements of NEPA and preparation of an EIS, that it was not required to ensure that mitigation measures which are within the authority and jurisdiction of third parties would be effectively implemented. Unlike BLM, the Forest Service was not relying upon mitigation as a basis for making a decision on whether to prepare an EIS. BLM, on the other hand, is trying to avoid the EIS requirements of NEPA by claiming that the impacts are insignificant.

We are cognizant of appellants' concerns about lack of concurrent reclamation. It appears from the reclamation is generally not possible in the context of this mining operation. ^{10/} Significantly, however, there is no itself preclude effective reclamation or create significant impacts. Mere differences of opinion regarding the measures provide no basis for reversal if the decision is reasonable and is supported by the record on appeal. Gold Alliance, 88 IBLA 133, 144 (1985).

Nonetheless, the record discloses a deficiency regarding the adequacy of the contingency reclamation covering any potentially significant impacts. Although in a number of places in the record it is indicated that bonding will cover the costs of reclamation ("the entire reclamation plan would be covered by a bond adequate to insure reclamation" (EA at 149); "[b]ond is being held to guarantee the agencies have enough money to reclaim the 3:1" (Comments on Golden Sunlight EA at 24, No. 94); "[b]ond has been increased from 1.8 million to 38.6 million for the mine expansion to ensure that GSM will pay the true cost of reclamation" (Comments on Golden Sunlight EA at 22, No. 91), the agencies also responded as follows to a question regarding adequacy of bonding:

17. Will GSM's bonding be sufficient years down the road to cover the unknown factor of rising costs? What length of time is the bonding to be continued? How much reclamation could be done in the case of a failure? Wouldn't this require many more acres of disturbed land for soil and other lost coverings? (Mulligan)

Response: The additional bond being held for reducing the slopes to 3:1 if the dump test fails does not cover the additional

^{10/} Regarding concurrent reclamation, GSM states:

"First, the agencies initial statement of concern in the May 30, 1990, EA, reflects a misunderstanding on the part of the agencies. The agencies refer to a February 7, 1990, memo by Golden Sunlight for the proposition that the company has committed to a plan for reclamation of waste rock dumps concurrent with mining. See page 101, May 30, 1990, EA. The February 7, 1990, memo is attached to the EA, and a review of the document shows that it lays out a methodology for performing some aspects of reclamation of the waste rock dumps, but does not say the dumps will be reclaimed concurrent with mining operations. Steps can be taken as the dumps are created to accommodate final reclamation later. The only thing it says about timing of the upper dumps is scheduled in the mid 1990's. The reason the memo cannot, and does not say that the dumps will be reclaimed concurrent with mining operations, is that the dumps will continue to be used for the dumping of waste rock material for the life of the mine. They cannot be reduced to final slope for reclamation, and reclamation commenced, until they are no longer needed. (GSM Answer at 34-35).

cost of soil recovery, liming, etc. that will be needed to redo slopes that fail.

(Comments on Golden Sunlight EA at 5, No. 17).

In response to a comment concerning when the success or failure of reclamation of the waste rock dump would be evaluated, a specific answer was not given. Rather, the agencies stated:

Response: The dump test has been agreed to by the administration of DSL and BLM in negotiations with the mining industry. They argued successfully that DSL could not prove that 2:1 slope reclamation was so therefore they should be given a chance to prove if they could do it. The technical staff of the BLM is also concerned about when we resolve the question of success or failure. Our staff opinion is that the standards applied are rigorous enough that the chances of success are extremely limited using the proposed plan in the EA. DSL and BLM would like all the dumps reclaimed at 3:1 with exceptions in areas where the rock is less acid producing or topography limits reduction to some slope between 2:1 and 3:1.

(Comments on Golden Sunlight EA at 5, No. 16).

Putting aside the question of who should have the burden of establishing the predicted success or failure of that the technical staffs of BLM and DSL believe that GSM has little chance of success in reclaiming 2:1 slopes, present bonding would be inadequate to "account for the additional cost of soil recovery, liming, etc. that will be needed if that fail," the reclamation plan is not covered by a bond sufficient to insure reclamation. Accordingly, unless GSM chooses the option of testing 2:1 slopes, the failure of which would pose additional costs which have not been bonded, GSM must provide to cover those costs.

Based on the record before us, we must conclude that the plan approved by BLM does not adequately ensure no significant environmental impact. Accordingly, we must set aside approval of that plan and remand the case to allow for a new plan or increased bonding. However, in order to avoid piecemeal review, we will address the other arguments raised.

Closely related to the issues raised by the challenge to the adequacy of the FONSI for the permit amendment is the issue regarding appellants' challenge to the adequacy of the reclamation requirements. Appellants contend that under the regulations all mining operations shall be reclaimed and no plan of operation will be approved until it is demonstrated that no significant degradation will occur, citing 43 CFR 3809.1-1; 3809.1-6. Appellants urge that BLM has violated its own regulations by approving a plan for test plots at 2h:1v, a plan that its technical experts agree will fail to ensure successful reclamation and thus cause degradation of the public lands.

In its answer, GSM notes that "reclamation" means taking such measures as will prevent unnecessary or undue degradation of the Federal lands. 43 CFR 3809.0-5(j). GSM urges that "unnecessary or undue degradation" occurs only when the disturbance is greater than that which would normally result when an activity is being accomplished by a prudent operator and proficient operations of similar character. 43 CFR 3809.0-5(k). GSM submits its reclamation plan more than 180 days before the EA reflects that GSM is fully committed to reclamation of waste dumps regardless of whether a 2h:1v or 3h:1v slope is most effective. BLM, GSM notes, has also expressly found that "the entire reclamation plan would be covered by a bond for reclamation" (EA at 149). Regarding the standard of review of the adequacy of the reclamation plan, GSM asks the court to determine whether the decision "reflects an evaluation of the environmental impacts sufficient to support an informed decision" on Tulkisarmute Native Community Council, 88 IBLA at 220. GSM contends this standard has been met.

BLM states it has concluded that the amendment proposed will not cause unnecessary or undue degradation because the mitigation and reclamation measures are sufficient to prevent such degradation. BLM insists its conclusion is supported by the record (BLM Response at 16). Like GSM, BLM argues that appellants ignore the modifications required by the EA for approval (BLM Response at 17). These modifications, BLM emphasizes, were reclamation specific and serve to ensure that water available to reactive material, a key to reclamation success. BLM thus asserts that where GSM's plan did not provide for oxygen and water, the agencies have required measures which are designed to ensure successful reclamation and prevent unnecessary or undue degradation. BLM points out that it maintains authority to modify the approved plan (43 CFR 3809.1-1-1) and to inspect operations and has required a bond sufficient to ensure reclamation will be completed so the disturbance will not cause unnecessary or undue degradation (BLM Response at 17).

DSL contends in its answer that appellants' allegations regarding undue degradation are based on the agency's failure to give GSM an opportunity to demonstrate that it can reclaim the waste rock dump with 2:1 slopes. DSL contends that, in its argument, appellants overlook the fact that stringent success standards have been imposed that 3:1 slopes are required and that agencies are bonded for 3:1 reclamation" (DSL Answer at 17). In response to comments on the EA raising these issues, DSL stated:

Tests have not replaced commitments to proven technology. The purpose of the tests is to prove whether the proposed technology for the site specific conditions encountered at the Golden Sunlight mine. Given the commitment to go to 3:1 slopes if necessary, and to implement the results of the proposed reclamation research, reclamation is assured.

(Comments on Golden Sunlight EA at 17, No. 70).

[4] Section 302(b) of the Federal Land Policy and Management Act of 1976, 43 U.S.C. § 1732(b) (1988) states: "In managing the public lands the Secretary shall, by regulation or otherwise, take any action necessary to prevent degradation of the lands." (Emphasis added.) See also 43 CFR 3809.2-2 (requirement for compliance with environmental laws).^{11/} A definition of this term appears at 43 CFR 3809.0-5(k), which states in part:

(k) Unnecessary or undue degradation means surface disturbance greater than what would normally result from an activity is being accomplished by a prudent operator in usual, customary, and proficient operation, taking into consideration the effects of operations on other resources and land uses, including resources and uses outside the area of operations. Failure to initiate and complete reasonable mitigation measures, including reclamation of disturbed areas or creation of a nuisance may constitute unnecessary or undue degradation. Failure to comply with applicable environmental protection statutes and regulations thereunder will constitute unnecessary or undue degradation.

Approval of a mining plan of operations will be affirmed where the record discloses that BLM carefully considered and analyzed potential environmental impacts, and conditioned approval upon imposition of mitigating measures designed to ensure reclamation. Department of the Navy, 108 IBLA 334 (1989). Our analysis of the adequacy of the record to support the plan of operations in detail above, compels a finding that BLM has complied with the requirements of the surface management regulations, except for the adequacy of the bonding to reclaim 2:1 test pit areas, a deficiency, as stated above, requires us to set aside and remand the BLM decision.

[5] Section 7 of ESA requires each Federal agency to ensure that any action carried out by the agency is not likely to jeopardize the continued existence of any threatened or endangered species. 16 U.S.C. § 1536(a) (1988). ESA also requires a Federal agency to confer with the Secretary of the Interior on any agency action likely to jeopardize the continued existence of a species proposed to be listed or result in the destruction or adverse modification of critical habitat proposed to be designated. 16 U.S.C. § 1536(d).

Regulations implementing the ESA require an agency to determine whether its actions "may affect" listed species habitat and, if so, to initiate formal consultation with FWS. 50 CFR 402.14. When Federal action

^{11/} Among the objectives of the surface management regulations at 43 CFR Subpart 3809 is to "[p]rovide for reclamation of disturbed areas." 43 CFR 3809.0-2(b).

is likely to jeopardize the continued existence of any proposed species or adversely modify proposed critical habitat, the agency is required to confer with FWS. 50 CFR 402.10. Appellants' consultation with FWS in light of the acknowledged presence of bald eagles and peregrine falcons in the vicinity of the mine, although the EA noted that "[t]wo avian listed species, the bald eagle and the peregrine falcon, are likely to occur in the general area" (emphasis added), the EA found that "[b]ald eagles prefer to nest near open water, hence it is very unlikely that this species would occur in the mine area" (EA at 33). Further, the record reveals that "[p]eregrine falcons are used for nesting (Snow, 1972), and for this reason, the proposed disturbed areas contain low habitat values for peregrine falcons." Wildlife Resources in the Vicinity of the Golden Sunlight Mine, (June 1988) (Administrative Record at Exh. 12) and the Board concluded that while it is possible that either or both of these species may be sighted in the vicinity of the mine, the record does not show that the proposed action is not likely to affect threatened or endangered species or their habitat. See In Re Bar First Go Round Salvage Sale, 121 IBLA 347 (1991). Accordingly, no consultation with FWS was required. Upper Mohawk Community Council, 104 IBLA 382 (1988).

[6] Appellants' claim under the MBTA, 16 U.S.C. § 703 (1988), and the Bald and Golden Eagle Protection Act, 16 U.S.C. §§ 668-668d (1988), must also be rejected. Appellants assert that the MBTA prohibits the taking of birds protected by several specific treaties. BLM, however, disputes the claim that it violated either the MBTA or the BGEPA. Appellants have not shown that a taking will occur under the acts. This Board has held that implementing proposals for modification or degradation of habitat do not constitute a "taking" for purposes of the MBTA. In Re Bar First Go Round Salvage Sale, 121 IBLA at 351-52. In our decision we quoted from the analysis of the U.S. District Court in Seattle Audubon Society v. U.S. Forest Service, 889 F.2d 160 (W.D. Wash. Mar. 7, 1991), involving timber sales conducted by the U.S. Forest Service. The court held that the MBTA to "take" is defined as to "pursue, hunt, take, capture, kill, attempt to take, capture, or kill" any migratory bird (1988). The court noted that this definition is properly distinguished from a taking under the ESA which includes habitat modification or degradation. The Board found the court's analysis compelling. 121 IBLA at 352. This same definition applies to BGEPA where "take" is defined to include "pursue, shoot, shoot at, poison, wound, kill, capture, trap, collect, molest, or harass" (1988). Moreover, in this case there is no evidence that the action approved by BLM's decision will result in modification or degradation for any of the species sought to be protected by those acts.

All motions of the parties not expressly ruled upon in our opinion have been considered in our review of the record.

Therefore, pursuant to the authority delegated to the Board of Land Appeals by the Secretary of the Interior, the Board of Land Appeals hereby grants the appeals of the

Mineral Policy Center and the Sierra Club are dismissed for lack of standing and the decision appealed from is affirmed and remanded in part.

C. Randall Grant, Jr.
Administrative Judge

I concur:

Bruce R. Harris
Deputy Chief Administrative Judge